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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,030	09/13/2000	Martin Page	36J.P284	8369

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EXAMINER
DUONG, THOMAS

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary		Application No.	Applicant(s)
		09/661,030	PAGE ET AL.
		Examiner	Art Unit
		Thomas Duong	2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 May 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-17, 19-43, 45-69, 71-95 and 97-104_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _See Continuation Sheet_ is/are rejected.

7)☒ Claim(s) _10, 14, 23-25, 36, 40, 49-51, 62, 66, 75-77, 88, 92 and 101-103_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Continuation of Disposition of Claims: Claims rejected are 2-9,11-13,15-17,19-22,28-35,37-39,41-43,45-48,54-61,63-65,67-69,71-74,80-87,89-91,93-95 and 97-100.

DETAILED ACTION

Response to Amendment

1.   This office action is in response to the amendment filed on May 10, 2004. The amendment filed on May 10, 2004 has been entered and made of record. *Claims 1-17, 19-43, 45-69, 71-95 and 97-104* are presented for further consideration and examination.

Response to Argument

2.   The Applicants' arguments and amendments filed on May 10, 2004 have been fully considered, but they are not persuasive.

3.   With regard to <u>claims 1, 27, 53 and 79</u>, the Applicants point out that:

- *The applied art is not seen to disclose or to suggest the foregoing arrangement, particularly as regards monitoring for issuance of an update message from a directory server indicating that a directory entry has been updated, obtaining in a case where the update message is issued the updated directory entry by using a second communication protocol that differs from a first communication protocol, extracting updated data therefrom, and sending the updated data to a network device for placement into its corresponding information.*

However, the Examiner finds that the Applicants' arguments are not persuasive and maintains that the Lautmann reference does disclose,

- *detecting the presence of at least one of the plurality of network devices on the network by using a first communication protocol;* (Lautmann, col.1, line 61 –

col.2, line 2; col.2, lines 63-65; col.3, lines 21-22; col.4, lines 62-65; module 204,

fig.2; Lautmann teaches of detecting the presence of a DLSw router (network

device) on the network by receiving a registration message from the DLSw

router. It can be interpreted that the protocol used to supply the information to

the directory server is SNMP. It is well known in the art that the SNMP protocol

can be used to supply information such as network address to the Network

Management Server)

- *obtaining, by using the first communication protocol, from the detected network

  device, information related to the corresponding network device;* (Lautmann,

  col.1, line 61 – col.2, line 2; col.2, lines 63-65; col.3, lines 21-23, lines 30-32;

  module 204, fig.2; Lautmann teaches of obtaining information related to the

  DLSw router such as the network address, number of packets

  transmitted/received, number of corrupted packets, etc. It can be interpreted that

  the protocol used to supply the information to the directory server is SNMP. It is

  well known in the art that the SNMP protocol can be used to supply information

  such as network address to the Network Management Server)

- *monitoring for issuance of an update message from the directory server

  indicating that a directory entry has been updated in the directory server;*

  (Lautmann, col.5, lines 38-46; module 330, fig.2; Lautmann teaches of waiting

  (monitoring) for update message from the directory service)

- *obtaining, in the case that an update message is issued, the updated directory

  entry from the directory server by using the second communication protocol;*

  (Lautmann, col.5, lines 38-46; module 330, fig.2; Lautmann teaches of waiting

  (monitoring) for update message from the directory service)

- *extracting updated data from the updated directory entry; and* (Lautmann, col.5, lines 38-46, lines 65-67; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service and processing the message)

- *sending the updated data to the network device which corresponds to the updated directory entry for placement into the information of the corresponding network device.* (Lautmann, col.5, lines 38-46, lines 65-67; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service and processing the message)

However, Lautmann reference does not explicitly disclose,

- *formatting the obtained information into a directory entry; and*

- *sending the directory entry to a directory server by using a second communication protocol;*

Willie teaches,

- *formatting(invoking suitable functions) the obtained information into a directory entry (data module entry); and* (Willie, col.8, lines 6-18; module 68; fig.2)

- *sending the directory entry to a directory server (directory service 62) by using a second communication protocol (any distributed directory service, i.e. Novell Directory Services, LDAP);* (Willie, col.7, line 56 – col.8, line 2; col.8, lines 23-45; module 62, fig.2)

In summary, the Examiner maintains that Lautmann and Willie do disclose a method that manage a plurality of network devices by first detecting their presence and obtaining related information using a first protocol; then, formatting (converting) the obtained information and register it as a directory entry in the directory server; and

finally, monitoring for update message from the directory server, obtaining it, and

processing it. Therefore, the Applicants still failed to clearly disclose the novelty of

the invention and identify specific limitation, which would define patentable distinction

over prior art.

4.   With regard to *claims 26, 52, 78 and 104*, Lautmann reference does disclose,

-   *detecting the presence of at least one of the plurality of network devices on the*

    network by using a first communication protocol; (Lautmann, col.1, line 61 –

    col.2, line 2; col.2, lines 63-65; col.3, lines 21-22; col.4, lines 62-65; module 204,

    fig.2; Lautmann teaches of detecting the presence of a DLSw router (network

    device) on the network by receiving a registration message from the DLSw

    router. It can be interpreted that the protocol used to supply the information to

    the directory server is SNMP. It is well known in the art that the SNMP protocol

    can be used to supply information such as network address to the Network .

    Management Server)

-   *obtaining, by using the first communication protocol, an information block from*

    each of the detected network devices, wherein the information block contains

    information related to the corresponding network device; (Lautmann, col.1, line

    61 – col.2, line 2; col.2, lines 63-65; col.3, lines 21-23, lines 30-32; module 204,

    fig.2; Lautmann teaches of obtaining information related to the DLSw router such

    as the network address, number of packets transmitted/received, number of

    corrupted packets, etc. It can be interpreted that the protocol used to supply the

    information to the directory server is SNMP. It is well known in the art that the

    SNMP protocol can be used to supply information such as network address to

    the Network Management Server)

- *monitoring, by using the first protocol, each of the detected network devices for an update of the information in the information block of the network device;* (Lautmann, col.1, line 61 – col.2, line 2; col.2, lines 63-65; col.3, lines 21-22; col.4, lines 62-65; module 204, fig.2; Lautmann teaches of detecting the presence of a DLSw router (network device) on the network by receiving a registration message from the DLSw router. It can be interpreted that the protocol used to supply the information to the directory server is SNMP. It is well known in the art that the SNMP protocol can be used to supply information such as network address to the Network Management Server)

- *obtaining, in the case that the information in the information block of one of the detected network devices has been updated, the updated information of the information block from the corresponding network device by using the first communication protocol, and sending the updated information to the directory server by using the second communication protocol for placement into the directory entry for the corresponding network device;* (Lautmann, col.1, line 61 – col.2, line 2; col.2, lines 63-65; col.3, lines 21-23, lines 30-32; module 204, fig.2; Lautmann teaches of obtaining information related to the DLSw router such as the network address, number of packets transmitted/received, number of corrupted packets, etc. It can be interpreted that the protocol used to supply the information to the directory server is SNMP. It is well known in the art that the SNMP protocol can be used to supply information such as network address to the Network Management Server)

- *monitoring, by using a third communication protocol, for issuance of an update message from the directory server indicating that a directory entry has been*

updated in the directory server; and (Lautmann, col.5, lines 38-46; module 330,

fig.2; Lautmann teaches of waiting (monitoring) for update message from the

directory service)

- *obtaining, in the case that an update message is issued, the updated directory*

  entry from the directory server by using the second communication protocol,

  extracting updated data from the updated directory entry, and sending the

  updated data to the network device which corresponds to the updated directory

  entry for placement into the information block of the corresponding network

  device. (Lautmann, col.5, lines 38-46; module 330, fig.2; Lautmann teaches of

  waiting (monitoring) for update message from the directory service)

However, Lautmann reference does not explicitly disclose,

- *formatting the obtained information into a directory entry; and*

- *sending the directory entry to a directory server by using a second*

  communication protocol;

Willie teaches,

- *formatting(invoking suitable functions) the obtained information into a directory*

  entry (data module entry); and (Willie, col.8, lines 6-18; module 68; fig.2)

- *sending the directory entry to a directory server (directory service 62) by using a*

  second communication protocol (any distributed directory service, i.e. Novell

  Directory Services, LDAP); (Willie, col.7, line 56 – col.8, line 2; col.8, lines 23-45;

  module 62, fig.2)

In summary, the Examiner maintains that Lautmann and Willie do disclose a method

that manage a plurality of network devices by first detecting their presence and

obtaining related information using a first protocol; then, formatting (converting) the

obtained information and register it as a directory entry in the directory server; and

finally, monitoring for update message from the directory server, obtaining it, and

processing it. Therefore, the Applicants still failed to clearly disclose the novelty of

the invention and identify specific limitation, which would define patentable distinction

over prior art.

5.   With regard to *claims 2-17, 19-25, 28-43, 45-51, 54-69, 71-77, 80-95 and 97-103*, they

are rejected at least by virtual of their dependency on the independent claims and by

other reasons set forth in the previous office action. Accordingly, rejections for *claims 2-*

17, 19-25, 28-43, 45-51, 54-69, 71-77, 80-95 and 97-103 are presented as below:

Claim Rejections - 35 USC § 103

6.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

7.   *Claims 1-104* are rejected under 35 U.S.C. 103(a) as being unpatentable over Lautmann

(US006560644B1) and in view of Willie et al. (US006052724A).

8.   With regard to *claims 1, 27, 53 and 79*, Lautmann reference discloses,

- *detecting the presence of at least one of the plurality of network devices on the*

  network by using a first communication protocol; (Lautmann, col.1, line 61 –

  col.2, line 2; col.2, lines 63-65; col.3, lines 21-22; col.4, lines 62-65; module 204,

  fig.2; Lautmann teaches of detecting the presence of a DLSw router (network

  device) on the network by receiving a registration message from the DLSw

  router. It can be interpreted that the protocol used to supply the information to

  the directory server is SNMP. It is well known in the art that the SNMP protocol

can be used to supply information such as network address to the Network

Management Server)

- *obtaining, by using the first communication protocol, from the detected network device, information related to the corresponding network device;* (Lautmann, col.1, line 61 – col.2, line 2; col.2, lines 63-65; col.3, lines 21-23, lines 30-32; module 204, fig.2; Lautmann teaches of obtaining information related to the DLSw router such as the network address, number of packets transmitted/received, number of corrupted packets, etc. It can be interpreted that the protocol used to supply the information to the directory server is SNMP. It is well known in the art that the SNMP protocol can be used to supply information such as network address to the Network Management Server)

- *monitoring for issuance of an update message from the directory server indicating that a directory entry has been updated in the directory server;* (Lautmann, col.5, lines 38-46; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service)

- *obtaining, in the case that an update message is issued, the updated directory entry from the directory server by using the second communication protocol;* (Lautmann, col.5, lines 38-46; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service)

- *extracting updated data from the updated directory entry; and* (Lautmann, col.5, lines 38-46, lines 65-67; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service and processing the message)

- *sending the updated data to the network device which corresponds to the updated directory entry for placement into the information of the corresponding network device.* (Lautmann, col.5, lines 38-46, lines 65-67; module 330, fig.2; Lautmann teaches of waiting (monitoring) for update message from the directory service and processing the message)

However, Lautmann reference does not explicitly disclose,

- *formatting the obtained information into a directory entry; and*

- *sending the directory entry to a directory server by using a second communication protocol;*

Willie teaches,

- *formatting(invoking suitable functions) the obtained information into a directory entry (data module entry); and* (Willie, col.8, lines 6-18; module 68; fig.2)

- *sending the directory entry to a directory server (directory service 62) by using a second communication protocol (any distributed directory service, i.e. Novell Directory Services, LDAP);* (Willie, col.7, line 56 – col.8, line 2; col.8, lines 23-45; module 62, fig.2)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Willie reference with Lautmann reference to enable for managing a distributed directory service which uses standard management protocols to generate notifications of events occurring within the distributed service.

9.   With regard to *claims 2-3, 28-29, 54-55 and 80-81*, Lautmann and Willie references disclose the invention substantially as claimed,

See *claims 1, 27, 53 and 79* rejection as detailed above.

Furthermore, Lautmann and Willie references disclose,

- *wherein the first communication protocol is a network management protocol.* (Lautmann, col.1, lines 61-65; col.1, line 67 – col.2, line 2; col.2, lines 63-65; Willie, col.2, lines 24-51; col.3, lines 3-9)

- *wherein the first communication protocol is SNMP.* (Lautmann, col.1, lines 61-65; col.1, line 67 – col.2, line 2; col.2, lines 63-65; Willie, col.2, lines 24-51; col.3, lines 3-9)

10.   With regard to *claims 4-6, 30-32, 56-58 and 82-84*, Lautmann and Willie references disclose the invention substantially as claimed,

See *claims 1, 27, 53 and 79* rejection as detailed above.

Furthermore, Lautmann and Willie references disclose,

- *wherein the second communication protocol is a directory-based protocol.* (Willie, col.7, line 56 - col.8, line 2; col.8, lines 23-45; module 62, fig.2)

- *wherein the second communication protocol is Lightweight Directory Access Protocol.* (Lautmann, col.3, lines 19-28; col.6, lines 21-46, lines 47-63; col.7, lines 1-16, lines 42-45)

- *wherein the second communication protocol is x.500 directory protocol.* (Lautmann, col.3, lines 19-28; col.6, lines 21-46, lines 47-63; col.7, lines 1-16, lines 42-45)

11.   With regard to *claims 7-8, 33-34, 59-60 and 85-86*, Lautmann and Willie references disclose the invention substantially as claimed,

See *claims 1, 27, 53 and 79* rejection as detailed above.

Furthermore, Lautmann and Willie references disclose,

- *sending a broadcast query message in the first communication protocol; and*
  (Lautmann, col.1, lines 61-65; col.1, line 67 – col.2, line 2; col.2, lines 63-65)

- receiving a reply message in the first communication protocol from each of the
  plurality of network devices that supports the first communication protocol,
  (Lautmann, col.1, lines 61-65; col.1, line 67 – col.2, line 2; col.2, lines 63-65)

- wherein, the reply message contains network identification information related to
  the corresponding network device that sent the reply message. (Lautmann, col.1,
  lines 61-65; col.1, line 67 – col.2, line 2; col.2, lines 63-65)

12.   With regard to <u>claims 9, 35, 61 and 87</u>, they include features or limitations as in *claim 1*.
Thus, *claims 9, 35, 61 and 87* are also rejected under the same rational as cited in the
rejection of the *claim 1* (see *claim 1* rejection as detailed above).

13.   With regard to <u>claims 11-13, 37-39, 63-65 and 89-91</u>, they include features or limitations
as in *claim 1*. Thus, *claims 10-14, 23-25, 36-41, 49-51, 62-66, 75-77, 88-92 and 101-
103* are also rejected under the same rational as cited in the rejection of the *claim 1* (see
claim 1 rejection as detailed above).

14.   With regard to <u>claims 15-22, 41-48, 67-74 and 93-100</u>, they include features or
limitations as in *claim 1*. Thus, *claims 15-22, 41-48, 67-74 and 93-100* are also rejected
under the same rational as cited in the rejection of the *claim 1* (see *claim 1* rejection as
detailed above).

Allowable Subject Matter

15.   <u>*Claims 10, 14, 23-25, 36, 40, 49-51, 62, 66, 75-77, 88, 92 and 101-103*</u> are objected to
as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims.

Conclusion

16.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

17.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Thomas Duong whose telephone number is 703/305-1886 or

571/272-3911 (after 11/01/2004). The examiner can normally be reached on M-F

7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A Wiley can be reached on 703/308-5221 or 571/272-3923 (after

11/01/2004). The fax phone numbers for the organization where this application or

proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306

for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703/305-3900 or

571/272-2100 (after 11/01/2004).

Thomas Duong (AU2143)

September 1, 2004

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER